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NEWS 8	DEC 23	New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/ USPAT2
NEWS 9	JAN 13	IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 10	JAN 13	New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to INPADOC
NEWS 11	JAN 17	Pre-1988 INPI data added to MARPAT
NEWS 12	JAN 17	IPC 8 in the WPI family of databases including WPIFV
NEWS 13	JAN 30	Saved answer limit increased
NEWS 14	JAN 31	Monthly current-awareness alert (SDI) frequency added to TULSA
NEWS 15	FEB 21	STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results
NEWS 16	FEB 22	Status of current WO (PCT) information on STN
NEWS 17	FEB 22	The IPC thesaurus added to additional patent databases on STN
NEWS 18	FEB 22	Updates in EPFULL; IPC 8 enhancements added
NEWS 19	FEB 27	New STN AnaVist pricing effective March 1, 2006
NEWS 20	FEB 28	MEDLINE/LMEDLINE reload improves functionality
NEWS 21	FEB 28	TOXCENTER reloaded with enhancements
NEWS 22	FEB 28	REGISTRY/ZREGISTRY enhanced with more experimental spectral property data
NEWS 23	MAR 01	INSPEC reloaded and enhanced
NEWS 24	MAR 03	Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 25	MAR 08	X.25 communication option no longer available after June 2006

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
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FILE 'HOME' ENTERED AT 15:08:53 ON 15 MAR 2006

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FILE 'BIOSIS' ENTERED AT 15:09:13 ON 15 MAR 2006
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=> glycoprotein
L1      256320 GLYCOPROTEIN

=> lyssavirus
L2         390 LYSSAVIRUS

=> rabies
L3        8968 RABIES

=> "lagos bat virus"
L4          59 "LAGOS BAT VIRUS"

=> "mokola virus"
L5         146 "MOKOLA VIRUS"

=> "duvenhage virus"
L6          63 "DUVENHAGE VIRUS"

=> "europeun bat lyssavirus"
L7           0 "EUROPEUN BAT LYSSAVIRUS"

=> "Australian bat lyssavirus"
L8          61 "AUSTRALIAN BAT LYSSAVIRUS"

=> L1 and L2
L9          98 L1 AND L2

=> L1 and l3
L10       1303 L1 AND L3

=> L1 and L4
L11         17 L1 AND L4

=> L1 and L5
L12         50 L1 AND L5

=> L1 and l6
L13         23 L1 AND L6

=> L1 and l8
L14         11 L1 AND L8

=> "site III"
L15       1033 "SITE III"

=> L9 and L15
L16         11 L9 AND L15

=> L10 and l15
L17         37 L10 AND L15

=> L11 and l15
```

L18 0 L11 AND L15

=> L11 and l15
L19 0 L11 AND L15

=> L12 and l15
L20 4 L12 AND L15

=> polypeptide and L17
L21 1 POLYPEPTIDE AND L17

=> fusion and L17
L22 6 FUSION AND L17

=> D L21 IBIB abs

L21 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:756739 CAPLUS
DOCUMENT NUMBER: 133:320992
TITLE: Fusion proteins of lyssavirus antigens for use in **rabies** vaccines and their preparation
INVENTOR(S): Jacob, Yves; Perrin, Pierre; Tordo, Noel; Bahloul, Chokri
PATENT ASSIGNEE(S): Institut Pasteur, Fr.
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000063242	A1	20001026	WO 2000-IB564	20000417
W: BR, CA, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6673601	B1	20040106	US 2000-549519	20000414
CA 2370278	AA	20001026	CA 2000-2370278	20000417
EP 1171454	A1	20020116	EP 2000-917245	20000417
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 2000009746	A	20020122	BR 2000-9746	20000417
US 2005064389	A1	20050324	US 2003-608538	20030630
PRIORITY APPLN. INFO.:			US 1999-129501P	P 19990415
			US 2000-549519	A1 20000414
			WO 2000-IB564	W 20000417

AB The present invention provides chimeric nucleic acids, preferably contained on an expression vector, that encode chimeric immunogenic **polypeptides**. The nucleic acids encode at least **site III** of a lyssavirus **glycoprotein**, which has been found to improve the immunogenicity of lyssavirus epitopes for protection from **rabies**. The chimeric nucleic acids and proteins can also contain antigenic determinants for epitopes other than those of lyssavirus. Thus, the invention provides chimeric nucleic acids and **polypeptides** that elicit a strong immune response to multiple antigens. Use of the methods of the present invention permits DNA vaccination without the need to supply multiple antigens on sep. DNA mols. Attempts to create a truncated version of the virus spike **glycoprotein** identified key regions in the protein essential for the induction of a strong immune response. Interleukin 2 strengthened the immune response to these constructs. Mice inoculated with expression vectors for strongly antigenic derivs. of the protein were able to protect mice against intracerebral challenges with several lyssavirus serotypes. Fusion proteins with antigens of poliovirus or lymphocytic choriomeningitis virus resulted in strong responses being mounted to these antigens. Mice challenged with a lethal inoculum of lymphocytic choriomeningitis showed effective protection with 70% surviving the challenge.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> L22 IBIB ABS 1-6
MISSING OPERATOR L22 IBIB
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> D L22 IBIB ABS 1-6

L22 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:756739 CAPLUS
DOCUMENT NUMBER: 133:320992
TITLE: **Fusion** proteins of lyssavirus antigens for use in **rabies** vaccines and their preparation
INVENTOR(S): Jacob, Yves; Perrin, Pierre; Tordo, Noel; Bahloul, Chokri
PATENT ASSIGNEE(S): Institut Pasteur, Fr.
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000063242	A1	20001026	WO 2000-IB564	20000417
W: BR, CA, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6673601	B1	20040106	US 2000-549519	20000414
CA 2370278	AA	20001026	CA 2000-2370278	20000417
EP 1171454	A1	20020116	EP 2000-917245	20000417
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 2000009746	A	20020122	BR 2000-9746	20000417
US 2005064389	A1	20050324	US 2003-608538	20030630

PRIORITY APPLN. INFO.:
US 1999-129501P P 19990415
US 2000-549519 A1 20000414
WO 2000-IB564 W 20000417

AB The present invention provides chimeric nucleic acids, preferably contained on an expression vector, that encode chimeric immunogenic polypeptides. The nucleic acids encode at least **site III** of a lyssavirus **glycoprotein**, which has been found to improve the immunogenicity of lyssavirus epitopes for protection from **rabies**. The chimeric nucleic acids and proteins can also contain antigenic determinants for epitopes other than those of lyssavirus. Thus, the invention provides chimeric nucleic acids and polypeptides that elicit a strong immune response to multiple antigens. Use of the methods of the present invention permits DNA vaccination without the need to supply multiple antigens on sep. DNA mols. Attempts to create a truncated version of the virus spike **glycoprotein** identified key regions in the protein essential for the induction of a strong immune response. Interleukin 2 strengthened the immune response to these constructs. Mice inoculated with expression vectors for strongly antigenic derivs. of the protein were able to protect mice against intracerebral challenges with several lyssavirus serotypes. **Fusion** proteins with antigens of poliovirus or lymphocytic choriomeningitis virus resulted in strong responses being mounted to these antigens. Mice challenged with a lethal inoculum of lymphocytic choriomeningitis showed effective protection with 70% surviving the challenge.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:753635 CAPLUS
DOCUMENT NUMBER: 134:357460
TITLE: Chimeric lyssavirus **glycoprotein**: New vector

for multivalent vaccines
AUTHOR(S): Desmezieres, E.; Jacob, Y.; Saron, M. -F.; Delpeyroux, F.; Tordo, N.; Perrin, P.
CORPORATE SOURCE: Lyssavirus Laboratory, Pasteur Institute, Paris, 75724/15, Fr.
SOURCE: Animal Cell Technology: Products from Cells, Cells as Products, Proceedings of the ESACT Meeting, 16th, Lugano, Switzerland, Apr. 25-29, 1999 (1999), Meeting Date 1999, 447-453. Editor(s): Bernard, Alain. Kluwer Academic Publishers: Dordrecht, Neth.
CODEN: 69ANWU
DOCUMENT TYPE: Conference
LANGUAGE: English

AB We have developed a multivalent vaccine prototype using the DNA technol. and chimeric lyssavirus **glycoproteins** to carry foreign virus epitopes. Lyssaviruses (**rabies** and **rabies**-related viruses) induce a fatal encephalomyelitis. They are divided in 7 genotypes (GT) and two principal groups according the cross-reactivity of virus neutralizing antibody (VNAb); group 1: GT 1, 4, 5, 6 and 7; group 2: GT2 and 3. Currently available vaccines belong to GT1. They induce protection against **rabies** (GT1) and are more or less efficacious against the other members of the group 1. They do not induce protection against group 2 viruses. Lyssavirus **glycoprotein** (G) is involved in the induction of both VNAb and protection. **Rabies** G mol. can be divided in two parts separated by a flexible hinge: the NH2 half and the COOH half containing the VNAb-inducing antigenic site II and III resp. Injection of chimeric plasmid containing the COOH half of Pasteur Virus (PV: GT1) and the NH2 half of GT5 or GT3 G induced VNAb and protection against parental viruses but also enlarged to the other genotypes. We have taken into account the flexibility of the site II-**site III** junction to insert foreign epitopes with the view to construct a multivalent vaccine prototype. The inserted sequences corresponded to two well characterized epitopes: the C3 B cell epitope of the poliovirus VP1 protein and the CD8+ T cell epitope of the lymphocytic choriomeningitis virus (LCMV) nucleoprotein. Under these conditions, injection of mice with chimeric G genes carrying the foreign epitopes induced antibodies against poliovirus and protection against LCMV whereas VNAb production against parental lyssaviruses was maintained. Therefore, chimeric lyssavirus **glycoproteins** can be proposed as new vector for multivalent vaccines not only against lyssaviruses but also against other pathogens.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:810701 CAPLUS
DOCUMENT NUMBER: 130:152276
TITLE: Chimeric lyssavirus **glycoproteins** with increased immunological potential
AUTHOR(S): Jallet, Corinne; Jacob, Yves; Bahloul, Chokri; Drings, Astrid; Desmezieres, Emmanuel; Tordo, Noel; Perrin, Pierre
CORPORATE SOURCE: Laboratoire des Lyssavirus, Institut Pasteur, Paris, 75724, Fr.
SOURCE: Journal of Virology (1999), 73(1), 225-233
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The **rabies** virus **glycoprotein** mol. (G) can be divided into two parts separated by a flexible hinge: the NH2 half (site II part) containing antigenic site II up to the linear region (amino acids [aa] 253 to 275 encompassing epitope VI [aa 264]) and the COOH half (**site III** part) containing antigenic **site III** and the transmembrane and cytoplasmic domains. The structural and immunol. roles of each part were investigated by cell transfection and mouse DNA-based immunization with homogeneous and chimeric G genes formed by **fusion** of the site II part of one genotype (GT) with the **site III** part of the same or another GT. Various site II-**site III** combinations between G genes of PV

(Pasteur virus strain) **rabies** (GT1), Mokola (GT3), and EBL1 (European bat lyssavirus 1 [GT5]) viruses were tested. Plasmids pGPV-PV, pGMok-Mok, pGMok-PV, and pGEBL1-PV induced transient expression of correctly transported and folded antigens in neuroblastoma cells and virus-neutralizing antibodies against parental viruses in mice, whereas, pG-PVIII (**site III** part only) and pGPV-Mok did not. The **site III** part of PV (GT1) was a strong inducer of T helper cells and was very effective at presenting the site II part of various GTs. Both parts are required for correct folding and transport of chimeric G proteins which have a strong potential value for immunol. studies and development of multivalent vaccines. Chimeric plasmid pGEBL1-PV broadens the spectrum of protection against European lyssavirus genotypes (GT1, GT5, and GT6).

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:512327 CAPLUS
DOCUMENT NUMBER: 115:112327
TITLE: Antigenicity of **rabies** virus **glycoprotein**
AUTHOR(S): Benmansour, A.; Leblois, H.; Coulon, P.; Tuffereau, C.; Gaudin, Y.; Flamand, A.; Lafay, F.
CORPORATE SOURCE: Lab. Genet. Virus, Cent. Natl. Rech. Sci., Gif-sur-Yvette, 91198, Fr.
SOURCE: Journal of Virology (1991), 65(8), 4198-203
CODEN: JOVIAM; ISSN: 0022-538X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Although the number of antigenic sites on the **rabies** virus **glycoprotein** that have been described regularly increases with time, no attempt has been made to carefully evaluate the relative importance of each of these sites. Here the authors provide a more precise description of the antigenicity of the protein in mice of the H-2d haplotype; this description was developed by using 264 newly isolated monoclonal antibodies (MAbs) and a collection of neutralization-resistant (MAR) mutants. Most of the MAbs (97%) recognized antigenic sites previously described as II and III. One minor antigenic site separated from **site III** by 3 amino acids, including a proline, was identified (minor site a). Despite their proximity, there is no overlap between **site III** and minor site a; i.e., **site III**-specific MAR mutants were neutralized by the 6 MAbs defining minor site a, and vice versa. One of the MAbs, 1D1, reacted with SDS-treated **glycoprotein** in Western blots (immunoblots) under reducing conditions and was therefore probably directed against a linear epitope. A MAR mutant selected with this MAb was still neutralized by MAbs of other specificities. This linear epitope was called G1 (G, Gif). As a general rule, the authors propose to reserve the term antigenic site (either major or minor) for regions of the protein which are defined by several MAbs originating from different **fusions** and to describe regions of the protein which are defined by a single MAb as epitopes.

L22 ANSWER 5 OF 6 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1999:55983 BIOSIS
DOCUMENT NUMBER: PREV199900055983
TITLE: Chimeric lyssavirus **glycoproteins** with increased immunological potential.
AUTHOR(S): Jallet, Corinne; Jacob, Yves; Bahloul, Chokri; Drings, Astrid; Desmezieres, Emmanuel; Tordo, Noel; Perrin, Pierre [Reprint author]
CORPORATE SOURCE: Lab. Lyssavirus, Inst. Pasteur, 28 rue du Dr. Roux, 75724 Paris Cedex 15, France
SOURCE: Journal of Virology, (Jan., 1999) Vol. 73, No. 1, pp. 225-233. print.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Feb 1999
Last Updated on STN: 16 Feb 1999

AB The **rabies** virus **glycoprotein** molecule (G) can be divided into two parts separated by a flexible hinge: the NH2 half (site II part) containing antigenic site II up to the linear region (amino acids (aa) 253 to 275 encompassing epitope VI (aa 264)) and the COOH half (**site III** part) containing antigenic **site III** and the transmembrane and cytoplasmic domains. The structural and immunological roles of each part were investigated by cell transfection and mouse DNA-based immunization with homogeneous and chimeric G genes formed by **fusion** of the site II part of one genotype (GT) with the **site III** part of the same or another GT. Various site II-**site III** combinations between G genes of PV (Pasteur virus strain) **rabies** (GT1), Mokola (GT3), and EBL1 (European bat lyssavirus 1 (GT5)) viruses were tested. Plasmids pGPV-PV, pGMok-Mok, pGMokPV, and pGEBL1-PV induced transient expression of correctly transported and folded antigens in neuroblastoma cells and virus-neutralizing antibodies against parental viruses in mice, whereas, pG-PVIII (**site III** part only) and pGPV-Mok did not. The **site III** part of PV (GT1) was a strong inducer of T helper cells and was very effective at presenting the site II part of various GTs. Both parts are required for correct folding and transport of chimeric G proteins which have a strong potential value for immunological studies and development of multivalent vaccines. Chimeric plasmid pGEBL1-PV broadens the spectrum of protection against European lyssavirus genotypes (GT1, GT5, and GT6).

L22 ANSWER 6 OF 6 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1991:431756 BIOSIS
DOCUMENT NUMBER: PREV199192087921; BA92:87921
TITLE: ANTIGENICITY OF **RABIES** VIRUS **GLYCOPROTEIN** .
AUTHOR(S): BENMANSOUR A [Reprint author]; LEBLOIS H; COULON P; TUFFEREAU C; GAUDIN Y; FLAMAND A; LAFAY F
CORPORATE SOURCE: LABORATOIRE GENETIQUE VIRUS, CENTRE NATIONAL RECHERCHE SCIENTIFIQUE, 91198 GIF-SUR-YVETTE CEDEX, FR
SOURCE: Journal of Virology, (1991) Vol. 65, No. 8, pp. 4198-4203. CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 26 Sep 1991
Last Updated on STN: 26 Sep 1991

AB Although the number of antigenic sites on the **rabies** virus **glycoprotein** that have been described regularly increases with time, no attempt has been made to carefully evaluate the relative importance of each of these sites. Here we provide a more precise description of the antigenicity of the protein in mice of the H-2d haplotype; we developed this description by using 264 newly isolated monoclonal antibodies (MAbs) and a collection of neutralization-resistant (MAR) mutants. Most of the MAbs (97%) recognized antigenic sites previously described as II and III. One minor antigenic site separated from **site III** by three amino acids, including a proline, was identified (minor site a). Despite their proximity, there is no overlap between **site III** and minor site a; i.e., **site III**-specific MAR mutants were neutralized by the six MAbs defining minor site a, and vice versa. One of our MAbs, 1D1, reacted with sodium dodecyl sulfate-treated **glycoprotein** in Western blots (immunoblots) under reducing conditions and was therefore probably directed against a liner epitope. A MAR mutant selected with this MAb was still neutralized by MAbs of other specificities. This linear epitope was called G1 (G, Gif). As a general rule, we proposed to reserve the term "antigenic site" (either major or minor) for regions of the protein which are defined by several MAbs originating from different **fusions** and to describe regions of the protein which are defined by a single MAb as epitopes. It would be interesting to test whether the same regions of the **rabies** virus **glycoprotein** are antigenic in mice of different haplotypes or in other species.

=> D L16 IBIB ABS 1-11

L16 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:756739 CAPLUS
DOCUMENT NUMBER: 133:320992
TITLE: Fusion proteins of **lyssavirus** antigens for use in rabies vaccines and their preparation
INVENTOR(S): Jacob, Yves; Perrin, Pierre; Tordo, Noel; Bahloul, Chokri
PATENT ASSIGNEE(S): Institut Pasteur, Fr.
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000063242	A1	20001026	WO 2000-IB564	20000417
W: BR, CA, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6673601	B1	20040106	US 2000-549519	20000414
CA 2370278	AA	20001026	CA 2000-2370278	20000417
EP 1171454	A1	20020116	EP 2000-917245	20000417
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 2000009746	A	20020122	BR 2000-9746	20000417
US 2005064389	A1	20050324	US 2003-608538	20030630

PRIORITY APPLN. INFO.:
US 1999-129501P P 19990415
US 2000-549519 A1 20000414
WO 2000-IB564 W 20000417

AB The present invention provides chimeric nucleic acids, preferably contained on an expression vector, that encode chimeric immunogenic polypeptides. The nucleic acids encode at least **site III** of a **lyssavirus glycoprotein**, which has been found to improve the immunogenicity of **lyssavirus** epitopes for protection from rabies. The chimeric nucleic acids and proteins can also contain antigenic determinants for epitopes other than those of **lyssavirus**. Thus, the invention provides chimeric nucleic acids and polypeptides that elicit a strong immune response to multiple antigens. Use of the methods of the present invention permits DNA vaccination without the need to supply multiple antigens on sep. DNA mols. Attempts to create a truncated version of the virus spike **glycoprotein** identified key regions in the protein essential for the induction of a strong immune response. Interleukin 2 strengthened the immune response to these constructs. Mice inoculated with expression vectors for strongly antigenic derivs. of the protein were able to protect mice against intracerebral challenges with several **lyssavirus** serotypes. Fusion proteins with antigens of poliovirus or lymphocytic choriomeningitis virus resulted in strong responses being mounted to these antigens. Mice challenged with a lethal inoculum of lymphocytic choriomeningitis showed effective protection with 70% surviving the challenge.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:753635 CAPLUS
DOCUMENT NUMBER: 134:357460
TITLE: Chimeric **lyssavirus glycoprotein**: New vector for multivalent vaccines
AUTHOR(S): Desmezieres, E.; Jacob, Y.; Saron, M. -F.; Delpeyroux, F.; Tordo, N.; Perrin, P.
CORPORATE SOURCE: Lyssavirus Laboratory, Pasteur Institute, Paris, 75724/15, Fr.
SOURCE: Animal Cell Technology: Products from Cells, Cells as Products, Proceedings of the ESACT Meeting, 16th, Lugano, Switzerland, Apr. 25-29, 1999 (1999), Meeting

Date 1999, 447-453. Editor(s): Bernard, Alain.
Kluwer Academic Publishers: Dordrecht, Neth.
CODEN: 69ANWU
DOCUMENT TYPE: Conference
LANGUAGE: English
AB We have developed a multivalent vaccine prototype using the DNA technol. and chimeric **lyssavirus glycoproteins** to carry foreign virus epitopes. **Lyssaviruses** (rabies and rabies-related viruses) induce a fatal encephalomyelitis. They are divided in 7 genotypes (GT) and two principal groups according the cross-reactivity of virus neutralizing antibody (VNAb); group 1: GT 1, 4, 5, 6 and 7; group 2: GT2 and 3. Currently available vaccines belong to GT1. They induce protection against rabies (GT1) and are more or less efficacious against the other members of the group 1. They do not induce protection against group 2 viruses. **Lyssavirus glycoprotein** (G) is involved in the induction of both VNAb and protection. Rabies G mol. can be divided in two parts separated by a flexible hinge: the NH2 half and the COOH half containing the VNAb-inducing antigenic site II and III resp. Injection of chimeric plasmid containing the COOH half of Pasteur Virus (PV: GT1) and the NH2 half of GT5 or GT3 G induced VNAb and protection against parental viruses but also enlarged to the other genotypes. We have taken into account the flexibility of the site II-**site III** junction to insert foreign epitopes with the view to construct a multivalent vaccine prototype. The inserted sequences corresponded to two well characterized epitopes: the C3 B cell epitope of the poliovirus VP1 protein and the CD8+ T cell epitope of the lymphocytic choriomeningitis virus (LCMV) nucleoprotein. Under these conditions, injection of mice with chimeric G genes carrying the foreign epitopes induced antibodies against poliovirus and protection against LCMV whereas VNAb production against parental **lyssaviruses** was maintained. Therefore, chimeric **lyssavirus glycoproteins** can be proposed as new vector for multivalent vaccines not only against **lyssaviruses** but also against other pathogens.
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:727176 CAPLUS
DOCUMENT NUMBER: 134:264708
TITLE: DNA-based immunization against rabies and rabies-related viruses: Towards multivalent vaccines
AUTHOR(S): Perrin, P.; Jacob, Y.; Desmezieres, E.; Tordo, N.
CORPORATE SOURCE: Lyssavirus Laboratory, Institut Pasteur, Paris, Fr.
SOURCE: Developments in Biologicals (2000), 104(Development and Clinical Progress of DNA Vaccines), 151-157
CODEN: DBEIAI; ISSN: 1424-6074
PUBLISHER: S. Karger AG
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review with 14 refs. Prototypes of multivalent DNA vaccines against **lyssaviruses** (LV: rabies and rabies-related viruses) and other viruses were developed using chimeric LV **glycoprotein** (cLVG) DNA and cLVG DNA carrying foreign epitopes. CLVG is composed of the N-terminal half of an LV genotype (GT) containing antigenic site II, the C-terminal half of GT containing antigenic **site III**, as well as the transmembrane and cytoplasmic domains of the same or a different GT. Both antigenic sites induced virus neutralizing antibodies (VNAb). Foreign B and T cell epitopes inserted between the two halves of cLVG correspond to the B cell C3 neutralization epitope of poliovirus VP1 protein and to the H2d MHC class I restricted T cell epitope of the nucleoprotein of the lymphocytic choriomeningitis virus (LCMV). In mice and dogs homogeneous rabies virus G DNA induced protection against wild-type rabies virus whereas cLVG protected against **lyssaviruses** . CLVG DNA carrying foreign epitopes induced VNAb against LV and poliovirus and protection against LCMV. The results obtained clearly demonstrate the potential usefulness of cLVG for the development of multivalent vaccines against viral diseases, including rabies and zoonoses.
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:594440 CAPLUS
DOCUMENT NUMBER: 131:298430
TITLE: **Lyssavirus glycoproteins** expressing immunologically potent foreign B cell and cytotoxic T lymphocyte epitopes as prototypes for multivalent vaccines
AUTHOR(S): Desmezieres, Emmanuel; Jacob, Yves; Saron, Marie-Francoise; Delpeyroux, Francis; Tordo, Noel; Perrin, Pierre
CORPORATE SOURCE: Laboratoire des Lyssavirus, Paris, 75724, Fr.
SOURCE: Journal of General Virology (1999), 80(9), 2343-2351
CODEN: JGVIAY; ISSN: 0022-1317
PUBLISHER: Society for General Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Truncated and chimeric **lyssavirus glycoprotein** (G) genes were used to carry and express non-**lyssavirus** B and T cell epitopes for DNA-based immunization of mice, with the aim of developing a multivalent vaccine prototype. Truncated G (GPVIII) was composed of the C-terminal half (aa 253-503) of the Pasteur rabies virus (PV: genotype 1) G containing antigenic **site III** and the transmembrane and cytoplasmic domains. The chimeric G (GEBL1-PV) was composed of the N-terminal half (aa 1-250) of the European bat **lyssavirus** 1 (genotype 5) G containing antigenic site II linked to GPVIII. Antigenic sites II and III are involved in the induction of virus-neutralizing antibodies. The B cell epitope was the C3 neutralization epitope of the poliovirus type 1 capsid VP1 protein. The T cell epitope was the H2d MHC I-restricted epitope of the nucleoprotein of lymphocytic choriomeningitis virus (LCMV) involved in the induction of both cytotoxic T cell (CTL) production and protection against LCMV. Truncated G carrying foreign epitopes induced weak antibody production against rabies and polio viruses and provided weak protection against LCMV. In contrast, the chimeric plasmid containing various combinations of B and CTL epitopes elicited simultaneous immunol. responses against both parental **lyssaviruses** and poliovirus and provided good protection against LCMV. The level of humoral and cellular immune responses depended on the order of the foreign epitopes inserted. Our results demonstrate that chimeric **lyssavirus glycoproteins** can be used not only to broaden the spectrum of protection against **lyssaviruses**, but also to express foreign B and CTL epitopes. The potential usefulness of chimeric **lyssavirus glycoproteins** for the development of multivalent vaccines against animal diseases and zoonoses, including rabies, is discussed.
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:810701 CAPLUS
DOCUMENT NUMBER: 130:152276
TITLE: Chimeric **lyssavirus glycoproteins** with increased immunological potential
AUTHOR(S): Jallet, Corinne; Jacob, Yves; Bahloul, Chokri; Drings, Astrid; Desmezieres, Emmanuel; Tordo, Noel; Perrin, Pierre
CORPORATE SOURCE: Laboratoire des Lyssavirus, Institut Pasteur, Paris, 75724, Fr.
SOURCE: Journal of Virology (1999), 73(1), 225-233
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The rabies virus **glycoprotein** mol. (G) can be divided into two parts separated by a flexible hinge: the NH2 half (site II part) containing antigenic site II up to the linear region (amino acids [aa] 253 to 275 encompassing epitope VI [aa 264]) and the COOH half (**site III** part) containing antigenic **site III** and the transmembrane and cytoplasmic domains. The structural and immunol. roles

of each part were investigated by cell transfection and mouse DNA-based immunization with homogeneous and chimeric G genes formed by fusion of the site II part of one genotype (GT) with the **site III** part of the same or another GT. Various site II-**site III** combinations between G genes of PV (Pasteur virus strain) rabies (GT1), Mokola (GT3), and EBL1 (European bat **lyssavirus** 1 [GT5]) viruses were tested. Plasmids pGPV-PV, pGMok-Mok, pGMok-PV, and pGEBL1-PV induced transient expression of correctly transported and folded antigens in neuroblastoma cells and virus-neutralizing antibodies against parental viruses in mice, whereas, pG-PVIII (**site III** part only) and pGPV-Mok did not. The **site III** part of PV (GT1) was a strong inducer of T helper cells and was very effective at presenting the site II part of various GTs. Both parts are required for correct folding and transport of chimeric G proteins which have a strong potential value for immunol. studies and development of multivalent vaccines. Chimeric plasmid pGEBL1-PV broadens the spectrum of protection against European **lyssavirus** genotypes (GT1, GT5, and GT6).

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:373551 CAPLUS
DOCUMENT NUMBER: 123:250825
TITLE: Mokola virus **glycoprotein** and chimeric proteins can replace rabies virus **glycoprotein** in the rescue of infectious defective rabies virus particles
AUTHOR(S): Mebatsion, Teshome; Schnell, Matthias J.; Conzelmann, Karl-Klaus
CORPORATE SOURCE: Federal Res. Cent. Virus Diseases Animals, Tuebingen, D-72076, Germany
SOURCE: Journal of Virology (1995), 69(3), 1444-51
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A reverse genetics approach which allows the generation of infectious defective rabies virus (RV) particles entirely from plasmid-encoded genomes and proteins (K.-K. Conzelmann and M. Schnell, J. Virol. 68:713-719, 1994) was used to investigate the ability of a heterologous **lyssavirus glycoprotein** (G) and chimeric G constructs to function in the formation of infectious RV-like particles. Virions containing a chloramphenicol acetyltransferase (CAT) reporter gene (SDI-CAT) were generated in cells simultaneously expressing the genomic RNA analog, the RV N, P, M, and L proteins, and engineered G constructs from transfected plasmids. The infectivity of particles was determined by a CAT assay after passage to helper virus-infected cells. The heterologous G protein from Eth-16 virus (Mokola virus, **lyssavirus** serotype 3) as well as a construct in which the ectodomain of RV G was fused to the cytoplasmic and transmembrane domains of the Eth-16 virus G rescued infectious SDI-CAT particles. In contrast, a chimeric protein composed of the amino-terminal half of the Eth-16 virus G and the carboxy-terminal half of RV G failed to produce infectious particles. Site-directed mutagenesis was used to convert the antigenic **site III** of RV G to the corresponding sequence of Eth-16 G. This chimeric protein rescued infectious SDI-CAT particles as efficiently as RV G. Virions containing the chimeric protein were specifically neutralized by an anti-Eth-16 virus serum and escaped neutralization by a monoclonal antibody directed against RV antigenic **site III**. The results show that entire structural domains as well as short surface epitopes of **lyssavirus** G proteins may be exchanged without affecting the structure required to mediate infection of cells.

L16 ANSWER 7 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 2004:90122 BIOSIS
DOCUMENT NUMBER: PREV200400094658
TITLE: Chimeric **lyssavirus** nucleic acids and polypeptides.
AUTHOR(S): Jacob, Yves [Inventor, Reprint Author]; Perrin, Pierre

[Inventor]; Tordo, Noel [Inventor]; Bahloul, Chokri [Inventor]
CORPORATE SOURCE: Maintenon, France
ASSIGNEE: Institut Pasteur, Paris, France
PATENT INFORMATION: US 6673601 20040106
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Jan 6 2004) Vol. 1278, No. 1. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 11 Feb 2004
Last Updated on STN: 11 Feb 2004

AB The present invention provides chimeric nucleic acids, preferably contained on an expression vector, that encode at least **site III** of a **lyssavirus glycoprotein**.

L16 ANSWER 8 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1999:417211 BIOSIS
DOCUMENT NUMBER: PREV199900417211
TITLE: **Lyssavirus glycoproteins** expressing immunologically potent foreign B cell and cytotoxic T lymphocyte epitopes as prototypes for multivalent vaccines.
AUTHOR(S): Desmezieres, Emmanuel; Jacob, Yves; Saron, Marie-Francoise; Delpeyroux, Francis; Tordo, Noel; Perrin, Pierre [Reprint author]
CORPORATE SOURCE: Laboratoire des Lyssavirus, Institut Pasteur, 25, rue du Dr Roux, 75724, Paris Cedex 15, France
SOURCE: Journal of General Virology, (Sept., 1999) Vol. 80, No. 9, pp. 2343-2351. print.
CODEN: JGVIAY. ISSN: 0022-1317.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 18 Oct 1999
Last Updated on STN: 18 Oct 1999

sept.

AB Truncated and chimeric **lyssavirus glycoprotein** (G) genes were used to carry and express non-**lyssavirus** B and T cell epitopes for DNA-based immunization of mice, with the aim of developing a multivalent vaccine prototype. Truncated G (GPVIII) was composed of the C-terminal half (aa 253-503) of the Pasteur rabies virus (PV: genotype 1) G containing antigenic **site III** and the transmembrane and cytoplasmic domains. The chimeric G (GEBL1-PV) was composed of the N-terminal half (aa 1-250) of the European bat **lyssavirus** 1 (genotype 5) G containing antigenic site II linked to GPVIII. Antigenic sites II and III are involved in the induction of virus-neutralizing antibodies. The B cell epitope was the C3 neutralization epitope of the poliovirus type 1 capsid VP1 protein. The T cell epitope was the H2d MHC 1-restricted epitope of the nucleoprotein of lymphocytic choriomeningitis virus (LCMV) involved in the induction of both cytotoxic T cell (CTL) production and protection against LCMV. Truncated G carrying foreign epitopes induced weak antibody production against rabies and polio viruses and provided weak protection against LCMV. In contrast, the chimeric plasmid containing various combinations of B and CTL epitopes elicited simultaneous immunological responses against both parental **lyssaviruses** and poliovirus and provided good protection against LCMV. The level of humoral and cellular immune responses depended on the order of the foreign epitopes inserted. Our results demonstrate that chimeric **lyssavirus glycoproteins** can be used not only to broaden the spectrum of protection against **lyssaviruses**, but also to express foreign B and CTL epitopes. The potential usefulness of chimeric **lyssavirus glycoproteins** for the development of multivalent vaccines against animal diseases and zoonoses, including rabies, is discussed.

L16 ANSWER 9 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1999:55983 BIOSIS
DOCUMENT NUMBER: PREV199900055983
TITLE: Chimeric **lyssavirus glycoproteins** with increased immunological potential.

AUTHOR(S): Jallet, Corinne; Jacob, Yves; Bahloul, Chokri; Drings, Astrid; Desmezieres, Emmanuel; Tordo, Noel; Perrin, Pierre [Reprint author]
CORPORATE SOURCE: Lab. Lyssavirus, Inst. Pasteur, 28 rue du Dr. Roux, 75724 Paris Cedex 15, France
SOURCE: Journal of Virology, (Jan., 1999) Vol. 73, No. 1, pp. 225-233. print.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Feb 1999
Last Updated on STN: 16 Feb 1999

AB The rabies virus **glycoprotein** molecule (G) can be divided into two parts separated by a flexible hinge: the NH2 half (site II part) containing antigenic site II up to the linear region (amino acids (aa) 253 to 275 encompassing epitope VI (aa 264)) and the COOH half (**site III** part) containing antigenic **site III** and the transmembrane and cytoplasmic domains. The structural and immunological roles of each part were investigated by cell transfection and mouse DNA-based immunization with homogeneous and chimeric G genes formed by fusion of the site II part of one genotype (GT) with the **site III** part of the same or another GT. Various site II-**site III** combinations between G genes of PV (Pasteur virus strain) rabies (GT1), Mokola (GT3), and EBL1 (European bat **lyssavirus** 1 (GT5)) viruses were tested. Plasmids pGPV-PV, pGMok-Mok, pGMokPV, and pGEBL1-PV induced transient expression of correctly transported and folded antigens in neuroblastoma cells and virus-neutralizing antibodies against parental viruses in mice, whereas, pG-PVIII (**site III** part only) and pGPV-Mok did not. The **site III** part of PV (GT1) was a strong inducer of T helper cells and was very effective at presenting the site II part of various GTs. Both parts are required for correct folding and transport of chimeric G proteins which have a strong potential value for immunological studies and development of multivalent vaccines. Chimeric plasmid pGEBL1-PV broadens the spectrum of protection against European **lyssavirus** genotypes (GT1, GT5, and GT6).

L16 ANSWER 10 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:165375 BIOSIS
DOCUMENT NUMBER: PREV199598179675
TITLE: Mokola virus **glycoprotein** and chimeric proteins can replace rabies virus **glycoprotein** in the rescue of infectious defective rabies virus particles.
AUTHOR(S): Mebatsion, Teshome; Schnell, Matthias J.; Conzelmann, Karl-Klaus [Reprint author]
CORPORATE SOURCE: Inst. Clinical Virol., Federal Res. Cent. Virus Diseases Animals, Paul-Ehrlich-Strasse 28, D-72076 Tuebingen, Germany
SOURCE: Journal of Virology, (1995) Vol. 69, No. 3, pp. 1444-1451.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
OTHER SOURCE: Genbank-U17064
ENTRY DATE: Entered STN: 11 Apr 1995
Last Updated on STN: 11 Apr 1995

AB A reverse genetics approach which allows the generation of infectious defective rabies virus (RV) particles entirely from plasmid-encoded genomes and proteins (K.-K Conzelmann and M. Schnell, J. Virol. 68:713-719, 1994) was used to investigate the ability of a heterologous **lyssavirus glycoprotein** (G) and chimeric G constructs to function in the formation of infectious RV-like particles. Virions containing a chloramphenicol acetyltransferase (CAT) reporter gene (SDI-CAT) were generated in cells simultaneously expressing the genomic RNA analog, the RV N, P, M, and L proteins, and engineered G constructs from transfected plasmids. The infectivity of particles was determined by a CAT assay after passage to helper virus-infected cells. The heterologous G protein from Eth-16 virus (Mokola virus, **lyssavirus** serotype 3) as well as a construct in which the ectodomain of RV G was

. fused to the cytoplasmic and transmembrane domains of the Eth-16 virus G rescued infectious SDI-CAT particles. In contrast, a chimeric protein composed of the amino-terminal half of the Eth-16 virus G and the carboxy-terminal half of RV G failed to produce infectious particles. Site-directed mutagenesis was used to convert the antigenic **site III** of RV G to the corresponding sequence of Eth-16 G. This chimeric protein rescued infectious SDI-CAT particles as efficiently as RV G. Virions containing the chimeric protein were specifically neutralized by an anti-Eth-16 virus serum and escaped neutralization by a monoclonal antibody directed against RV antigenic **site III**. The results show that entire structural domains as well as short surface epitopes of **lyssavirus** G proteins may be exchanged without affecting the structure required to mediate infection of cells.

L16 ANSWER 11 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1989:204165 BIOSIS
DOCUMENT NUMBER: PREV198987105069; BA87:105069
TITLE: CHARACTERIZATION OF RABIES VIRUS ISOLATED FROM BOVINES IN PARANA BRAZIL BY USING MONOCLONAL ANTIBODIES.
AUTHOR(S): MONTANO J A [Reprint author]; POLACK G W
CORPORATE SOURCE: INST TECNOL PARANA, CAIXA POSTAL 357, 80001 CURITIBA, PR, BRAZIL
SOURCE: Arquivos de Biologia e Tecnologia (Curitiba), (1988) Vol. 31, No. 4, pp. 595-602.
CODEN: ABTTAP. ISSN: 0365-0979.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 20 Apr 1989
Last Updated on STN: 20 Apr 1989

AB The identification of two antigenic variants of rabies virus in Brazil, carried out by T.J. Wiktor in 1981 from strains considered to be atypical (Hayashi et al.), as well as the isolation of vaccine virus from one rabies case in a vaccinated coati (Ohi et al.), demonstrate the importance of the studies on antigenic characterization as an indispensable tool for epidemiological surveillance. Thus, a virus strain isolated from a bovine said to be vaccinated with the ERA vaccine and that died 21 days later, as well as a virus isolate from a bovine registered as not vaccinated, were studied with a panel of 36 anti-nucleocapsid monoclonal antibodies and another of 40 anti-**glycoprotein** monoclonal antibodies, granted by the Wistar Institute (Philadelphia). One of the monoclonal antibodies, 502-3, identifies these strains as **Lyssavirus**, while 103-7 and 422-5 confirm them as true rabies viruses and not rabies - related viruses. The other monoclonal antibodies show minor differences in the antigenic **sites III**-B and V in the **glycoprotein** of the rabies virus isolated from the vaccinated bovine as compared with the pattern described for the ERA vaccine strain and that of the isolate from the not-vaccinated animal. It is not yet possible to assign to these differences, which exclude the hypothesis of vaccine-induced rabies, the major role in the failure of vaccine prophylaxis. It was also showed that the ERA strain and a field strain from bovines have have the same antigenic pattern. It is still necessary to characterize more strains isolated from not-vaccinated bovines and vampire bats in order to have a better basis for the comparative study with other virus strains.

=> D L20 IBIB ABS 1-4

L20 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:810701 CAPLUS
DOCUMENT NUMBER: 130:152276
TITLE: Chimeric lyssavirus **glycoproteins** with increased immunological potential
AUTHOR(S): Jallet, Corinne; Jacob, Yves; Bahloul, Chokri; Drings, Astrid; Desmezieres, Emmanuel; Tordo, Noel; Perrin, Pierre
CORPORATE SOURCE: Laboratoire des Lyssavirus, Institut Pasteur, Paris,

75724, Fr.
SOURCE: Journal of Virology (1999), 73(1), 225-233
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The rabies virus **glycoprotein** mol. (G) can be divided into two parts separated by a flexible hinge: the NH2 half (site II part) containing antigenic site II up to the linear region (amino acids [aa] 253 to 275 encompassing epitope VI [aa 264]) and the COOH half (**site III** part) containing antigenic **site III** and the transmembrane and cytoplasmic domains. The structural and immunol. roles of each part were investigated by cell transfection and mouse DNA-based immunization with homogeneous and chimeric G genes formed by fusion of the site II part of one genotype (GT) with the **site III** part of the same or another GT. Various site II-**site III** combinations between G genes of PV (Pasteur virus strain) rabies (GT1), Mokola (GT3), and EBL1 (European bat lyssavirus 1 [GT5]) viruses were tested. Plasmids pGPV-PV, pGMok-Mok, pGMok-PV, and pGEBL1-PV induced transient expression of correctly transported and folded antigens in neuroblastoma cells and virus-neutralizing antibodies against parental viruses in mice, whereas, pG-PVIII (**site III** part only) and pGPV-Mok did not. The **site III** part of PV (GT1) was a strong inducer of T helper cells and was very effective at presenting the site II part of various GTs. Both parts are required for correct folding and transport of chimeric G proteins which have a strong potential value for immunol. studies and development of multivalent vaccines. Chimeric plasmid pGEBL1-PV broadens the spectrum of protection against European lyssavirus genotypes (GT1, GT5, and GT6).
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:373551 CAPLUS
DOCUMENT NUMBER: 123:250825
TITLE: **Mokola virus glycoprotein** and chimeric proteins can replace rabies virus **glycoprotein** in the rescue of infectious defective rabies virus particles
AUTHOR(S): Mebatsion, Teshome; Schnell, Matthias J.; Conzelmann, Karl-Klaus
CORPORATE SOURCE: Federal Res. Cent. Virus Diseases Animals, Tuebingen, D-72076, Germany
SOURCE: Journal of Virology (1995), 69(3), 1444-51
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A reverse genetics approach which allows the generation of infectious defective rabies virus (RV) particles entirely from plasmid-encoded genomes and proteins (K.-K. Conzelmann and M. Schnell, J. Virol. 68:713-719, 1994) was used to investigate the ability of a heterologous lyssavirus **glycoprotein** (G) and chimeric G constructs to function in the formation of infectious RV-like particles. Virions containing a chloramphenicol acetyltransferase (CAT) reporter gene (SDI-CAT) were generated in cells simultaneously expressing the genomic RNA analog, the RV N, P, M, and L proteins, and engineered G constructs from transfected plasmids. The infectivity of particles was determined by a CAT assay after passage to helper virus-infected cells. The heterologous G protein from Eth-16 virus (**Mokola virus**, lyssavirus serotype 3) as well as a construct in which the ectodomain of RV G was fused to the cytoplasmic and transmembrane domains of the Eth-16 virus G rescued infectious SDI-CAT particles. In contrast, a chimeric protein composed of the amino-terminal half of the Eth-16 virus G and the carboxy-terminal half of RV G failed to produce infectious particles. Site-directed mutagenesis was used to convert the antigenic **site III** of RV G to the corresponding sequence of Eth-16 G. This chimeric protein rescued infectious SDI-CAT particles as efficiently as RV G. Virions containing the chimeric protein were specifically neutralized by an

anti-Eth-16 virus serum and escaped neutralization by a monoclonal antibody directed against RV antigenic **site III**. The results show that entire structural domains as well as short surface epitopes of lyssavirus G proteins may be exchanged without affecting the structure required to mediate infection of cells.

L20 ANSWER 3 OF 4 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1999:55983 BIOSIS
DOCUMENT NUMBER: PREV199900055983
TITLE: Chimeric lyssavirus **glycoproteins** with increased immunological potential.
AUTHOR(S): Jallet, Corinne; Jacob, Yves; Bahloul, Chokri; Drings, Astrid; Desmezieres, Emmanuel; Tordo, Noel; Perrin, Pierre [Reprint author]
CORPORATE SOURCE: Lab. Lyssavirus, Inst. Pasteur, 28 rue du Dr. Roux, 75724 Paris Cedex 15, France
SOURCE: Journal of Virology, (Jan., 1999) Vol. 73, No. 1, pp. 225-233. print.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Feb 1999
Last Updated on STN: 16 Feb 1999

AB The rabies virus **glycoprotein** molecule (G) can be divided into two parts separated by a flexible hinge: the NH2 half (site II part) containing antigenic site II up to the linear region (amino acids (aa) 253 to 275 encompassing epitope VI (aa 264)) and the COOH half (**site III** part) containing antigenic **site III** and the transmembrane and cytoplasmic domains. The structural and immunological roles of each part were investigated by cell transfection and mouse DNA-based immunization with homogeneous and chimeric G genes formed by fusion of the site II part of one genotype (GT) with the **site III** part of the same or another GT. Various site II-**site III** combinations between G genes of PV (Pasteur virus strain) rabies (GT1), Mokola (GT3), and EBL1 (European bat lyssavirus 1 (GT5)) viruses were tested. Plasmids pGPV-PV, pGMok-Mok, pGMokPV, and pGEBL1-PV induced transient expression of correctly transported and folded antigens in neuroblastoma cells and virus-neutralizing antibodies against parental viruses in mice, whereas, pG-PVIII (**site III** part only) and pGPV-Mok did not. The **site III** part of PV (GT1) was a strong inducer of T helper cells and was very effective at presenting the site II part of various GTs. Both parts are required for correct folding and transport of chimeric G proteins which have a strong potential value for immunological studies and development of multivalent vaccines. Chimeric plasmid pGEBL1-PV broadens the spectrum of protection against European lyssavirus genotypes (GT1, GT5, and GT6).

L20 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:165375 BIOSIS
DOCUMENT NUMBER: PREV199598179675
TITLE: **Mokola virus glycoprotein** and chimeric proteins can replace rabies virus **glycoprotein** in the rescue of infectious defective rabies virus particles.
AUTHOR(S): Mebatsion, Teshome; Schnell, Matthias J.; Conzelmann, Karl-Klaus [Reprint author]
CORPORATE SOURCE: Inst. Clinical Virol., Federal Res. Cent. Virus Diseases Animals, Paul-Ehrlich-Strasse 28, D-72076 Tuebingen, Germany
SOURCE: Journal of Virology, (1995) Vol. 69, No. 3, pp. 1444-1451.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
OTHER SOURCE: Genbank-U17064
ENTRY DATE: Entered STN: 11 Apr 1995
Last Updated on STN: 11 Apr 1995

AB A reverse genetics approach which allows the generation of infectious defective rabies virus (RV) particles entirely from plasmid-encoded

genomes and proteins (K.-K Conzelmann and M. Schnell, J. Virol. 68:713-719, 1994) was used to investigate the ability of a heterologous lyssavirus **glycoprotein** (G) and chimeric G constructs to function in the formation of infectious RV-like particles. Virions containing a chloramphenicol acetyltransferase (CAT) reporter gene (SDI-CAT) were generated in cells simultaneously expressing the genomic RNA analog, the RV N, P, M, and L proteins, and engineered G constructs from transfected plasmids. The infectivity of particles was determined by a CAT assay after passage to helper virus-infected cells. The heterologous G protein from Eth-16 virus (**Mokola virus** , lyssavirus serotype 3) as well as a construct in which the ectodomain of RV G was fused to the cytoplasmic and transmembrane domains of the Eth-16 virus G rescued infectious SDI-CAT particles. In contrast, a chimeric protein composed of the amino-terminal half of the Eth-16 virus G and the carboxy-terminal half of RV G failed to produce infectious particles. Site-directed mutagenesis was used to convert the antigenic **site III** of RV G to the corresponding sequence of Eth-16 G. This chimeric protein rescued infectious SDI-CAT particles as efficiently as RV G. Virions containing the chimeric protein were specifically neutralized by an anti-Eth-16 virus serum and escaped neutralization by a monoclonal antibody directed against RV antigenic **site III**. The results show that entire structural domains as well as short surface epitopes of lyssavirus G proteins may be exchanged without affecting the structure required to mediate infection of cells.

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=> D L17 IBIB TO 1-37
'TO' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files.  Refer to file specific help messages
or the STNGUIDE file for information on formats available in
individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):TI 1-37
'1-37' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files.  Refer to file specific help messages
or the STNGUIDE file for information on formats available in
individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):D L17 IBIB TI 1-37
'D' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files.  Refer to file specific help messages
or the STNGUIDE file for information on formats available in
individual files.
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